

USPQ2d 1614, 1617 (Fed. Cir. 1999)). Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one “to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.” *Kotzab*, 55 USPQ2d at 1316 (quoting *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983)).

Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. *In re Kotzab*, 55 USPQ2d at 1316-1317 (citing *B.F. Goodrich Co. v. Aircraft Breaking Sys. Corp.*, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996)); see also MPEP § 2142 (quoting *Ex parte Clapp*, 227 USPQ 972, 973 (B. Pat. App. & Inter. 1985)) (“To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.”).

Here, the Examiner provides no showing of a suggestion or motivation to modify JP ‘835. Nor does the Examiner present a convincing line of reasoning. Instead, the Examiner makes the bald assertion that it would have been obvious “to have finished the surface to 0.12 μm or less, or to any other finish, dependent on the desired tolerances.” But JP ‘835—disclosed at page 2, lines 1-6 in the present specification—does not teach or suggest the importance of finish quality, let alone that such is related to the reduction of vibrations and noises of the ball screw. Instead, JP ‘835 teaches a separator shape useful for reducing vibration and noises in a ball rolling groove. Further, the Examiner does not cite any prior art directed to finish quality, let alone to finish quality as it relates to the reduction of vibrations and noises of the ball screw by defining the surface roughness of the ball rolling grooves. Accordingly, one of ordinary skill in the art—following the teachings of JP ‘835 as a whole—would not have found it obvious to provide at least one of a first and second helical ball rolling grooves with a surface roughness of 0.12 μm or less in average roughness (Ra) along a helical direction of a helical raceway, as set forth in Applicant’s claim 1.

Instead, it is Applicant who teaches that providing a surface with a roughness of 0.12 μm or less in average roughness (Ra) provides a ball screw more effective in reducing vibrations and noises than a conventional ball screw.¹

In light of the above, the Examiner's rejection under §103(a) amounts to no more than an impermissible hindsight reconstruction of Applicant's invention. That is, the Examiner takes Applicant's teaching of surface roughness and uses it against him. This, the Examiner cannot do. Afterall, the teaching or suggestion to make the claimed modification and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See also *Uniroyal, Inc. v. Rudcan-Wiley, Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

Stated another way, mere allegations by the Examiner, that the claimed subject matter is obvious in view of the prior art, do not create a presumption of unpatentability. *In re Soli*, 317 F.2d 941, 137 USPQ 797 (CCPA 1963). It is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). This burden can only be satisfied by an objective teaching in the prior art or by cogent reasoning that the knowledge is available to one of ordinary skill in the art. *In re Lalu*, 747 F.2d 703, 223 USPQ 1257 (Fed. Cir. 1984).

In the present case, the Examiner's reasoning for holding obvious the claimed invention in view of the prior art appears to be based, not on knowledge generally available from the prior art but, rather, on the Applicant's own disclosure of problems existing in prior art devices and the Applicant's solution thereof.

For at least any of the above reasons, JP '835 fails to render obvious Applicants claims 1-16.

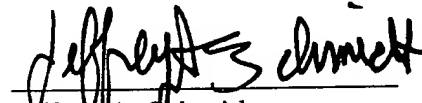
¹ Specification at: page 2, line 15 - page 4, line 21. See also Tables 1 and 2, on pages 10 and 14, respectively.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Jeffrey A. Schmidt

Registration No. 41,574

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE



23373

PATENT TRADEMARK OFFICE

Date: July 2, 2003